

ANALYSIS OF RENAL BIOPSY IN TERTIARY CARE CENTER IN SOUTHERN TAMILNADU

ABSTRACT

BACKGROUND

Renal biopsy has contributed greatly to a rational classification of intrinsic renal disease and pathogenic mechanism involved, prognosis, treatment. Theoretically biopsy should be considered whenever clinical and laboratory data not sufficient to define the nature of the disease. So even today inspite of all new sophisticated less invasive test,renal biopsy is still considered by most of nephrologist. Therefore, we report epidemiologic data of renal biopsies from a single unit, which focused on cases admitted in TVMCH.

AIM OF THE STUDY

To determine and study various histopathological types in renal failure patients and to compare with the clinical presentation, biochemical parameters and complications.

METHODS

This Prospective analytical study was conducted in 100 renal failure patients admitted in tirunelveli medical college hospital. All patients were investigated clinically and with relevant blood, urine investigations and their spectrum of histological features in renal biopsy was classified and correlated with their clinical profile.

RESULTS

Our study showed that primary GN(74%) are the predominant forms of GN in study population ,followed by secondary GN(12%). MGN and IRGN was the most common & second most common primary GN among the study group (37%, 16% respectively).MCD , FSGS was the third & fourth most common primary GN among the study group (12%, 10% respectively). IgA Nephropathy and crescentic glomerulonephritis were the fifth most common primary GN reported in our study group (5%). MPGN was least common type of primary GN(1%). And, LN was the most common cause of secondary GN (12%) and constituted the most common lesion among female adults and in the middle-age groups. Diabetic nephropathy was the second most common cause of secondary GN (1%) in our study. Among tubulo-interstitial diseases, AIN was the most common, seen in (10%) CIN was seen in 0%. In our study the other kidney disease constitute (4%), among this amyloidosis AL type, lymphatic infiltration of kidney,C3 glomerulopathy, low IgG4 cells are seen. Among the presentation of patients , anaemia and hypoproteinemia was found to be strongly associated with renal diseases in our study population with significant p value of 0.001 and 0.042 respectively. Hypercholesterolemia was seem to be associated more commonly with Membranous Nephropathy followed by Minimal change disease. Whereas, Hypertriglyceridemia was more commonly associated with Minimal Change disease.

CONCLUSION

MGN was the most common primary GN, followed by IRGN, while LN was the most common secondary GN, followed by Diabetic nephropathy in our study from southern tamilnadu. Our data make an important contribution to the understanding of the prevalence and pattern of end-stage kidney disease in the southern tamilnadu. It may be used as reference data for further research into renal disease in rural areas.